



PATENT
Docket No. 544042000100

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Express Mail Label No.: EV335373672US

Date of Deposit: October 12, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Tia Zimmerman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Randolph A. MOECKLI et al.

Serial No.: 10/280,998

Filing Date: April 7, 2004

For: AFFINITY PURIFICATION SYSTEM
USING TROPONIN MOLECULES AS
AFFINITY LIGANDS

Examiner: Not Yet Assigned

Group Art Unit: 1712

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Pursuant to the USPTO notice dated July 11, 2003, waiving the requirement under 37 C.F.R. § 1.98 (a)(2)(i) to provide copies of U.S. Patents and U.S. Published Applications, copies of those references are not submitted. Copies of non-patent literature are submitted herewith. The Examiner is requested to make these documents of record in the application.

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97(e)(1) has been provided.
- ☒ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97(e)(1) has been provided.
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of __ is enclosed.
 - ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above; accordingly, no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a check in the amount of __ is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. §1.17(p)) is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **544042000100**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: October 12, 2004

Respectfully submitted,

By: *Jill A. Jacobson*
Jill Jacobson
Registration No. 40,030

Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5876
Facsimile: (650) 494-0792

Form PTO-1449

Docket Number 544042000100

Application Number 10/820,998

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Randolph A. MOECKLI et al.

Filing Date April 7, 2004

Group Art Unit 1712

Mailing Date October 12, 2004

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	09/12/2002	2002/0127602	Shi et al.			
	2.	07/03/1984	4,458,066	Caruthers et al.			
	3.	09/04/1984	4,469,863	Ts'o et al.			
	4.	09/17/1985	4,542,225	Blattler et al.			
	5.	10/21/1986	4,618,492	Blattler et al.			
	6.	11/25/1986	4,625,014	Senter et al.			
	7.	04/21/1987	4,659,839	Nicolotti et al.			
	8.	06/09/1987	4,671,958	Rodwell et al.			
	9.	07/28/1987	4,683,202	Mullis			
	10.	07/23/1991	5,034,506	Summerton et al.			
	11.	11/24/1992	5,166,320	Wu et al.			
	12.	06/01/1993	5,216,141	Benner			
	13.	08/10/1993	5,235,033	Summerton et al.			
	14.	01/31/1995	5,386,023	Sanghvi et al.			
	15.	02/11/1997	5,602,240	De Mesmaeker et al.			
	16.	06/10/1997	5,637,684	Cook et al.			
	17.	07/01/1997	5,644,048	Yau			
	18.	12/22/1998	5,851,554	Lee et al.			
	19.	06/06/2000	6,072,040	Davé et al.			
	20.	09/05/2000	6,114,180	Doth et al.			
	21.	09/12/2000	6,117,976	Neri et al.			
	22.	06/19/2001	6,248,869	Morjana et al.			
	23.	11/13/2001	6,316,409	Neri et al.			
	24.	11/05/2002	6,475,785	Shi et al.			
	25.	12/17/2002	6,495,673	Neri et al.			

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 544042000100	Application Number 10/820,998
	Applicant Randolph A. MOECKLI et al.	
	Filing Date April 7, 2004	Group Art Unit 1712
	Mailing Date October 12, 2004	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	26.	Acsadi, G. et al. (August 29, 1991). "Human Dystrophin Expression in mdx Mice After Intramuscular Injection of DNA Constructs," <i>Nature</i> 352:815-818.
	27.	Al-Hillawi, E. et al. (November 1, 1994). "Overexpression of Human Cardiac Troponin-I and Troponin-C in <i>Escherichia coli</i> and Their Purification and Characterisation. Two Point Mutations Allow High-Level Expression of Troponin-I," <i>Eur. J. Biochem</i> 225(3):1195-1201.
	28.	Anonymous (February 1991). "Amplification of Nucleic Acid Sequences: The Choices Multiply," <i>The Journal of NIH Research</i> 3:81-94.
	29.	Arnheim, N. et al. (October 1, 1990). "Polymerase Chain Reaction," <i>C&EN</i> 36-47.
	30.	Baldari, C. et al. (1987). "A Novel Leader Peptide Which Allows Efficient Secretion of a Fragment of Human Interleukin 1 β in <i>Saccharomyces cerevisiae</i> ," <i>EMBO Journal</i> 6(1):229-234.
	31.	Barringer, K.J. et al. (1990). "Blunt-End and Single-Strand Ligations by <i>Escherichia coli</i> Ligase: Influence on an In Vitro Amplification Scheme," <i>Gene</i> 89:117-122.
	32.	Beaucage, S.L. et al. (1981). "Deoxynucleoside Phosphoramidites - A New Class of Key Intermediates for Deoxypolynucleotide Synthesis," <i>Tetrahedron Letters</i> 22(20):1859-1862.
	33.	Beaucage, S.L. et al. (1993). "Tetrahedron Report Number 329: The Functionalization of Oligonucleotides Via Phosphoramidite Derivatives," <i>Tetrahedron</i> 49(10):1925-1963.
	34.	Bedouelle, H. et al. (1988). "Production in <i>Escherichia coli</i> and One-Step Purification of Bifunctional Hybrid Proteins Which Bind Maltose," <i>Eur J. Biochem.</i> 171:541-549.
	35.	Bolli, M. et al. (1994). " α -Bicyclo-DNA: Synthesis, Characterization, and Pairing Properties of α -DNA-analogues with Restricted Conformational Flexibility in the Sugar-Phosphate Backbone," Chapter 7 In <u>Carbohydrate Modifications in Antisense Research</u> ASC Symposium Series 580. Sanghui, Y.S. et al. ed. pp. 100-117.
	36.	Borjigin, J. et al. (January, 1993). "Bovine Pancreatic Trypsin Inhibitor-Trypsin Complex As a Detection System for Recombinant Proteins," <i>Proc. Natl. Acad. Sci USA</i> 90:337-341.
	37.	Brill, W. K-D. et al. (1989). "Synthesis of Oligodeoxynucleotide Phosphorodithioates via Thioamidites," <i>J. Am. Chem. Soc.</i> 111:2321-2322.
	38.	Brown, E.L. et al. (1979). "Chemical Synthesis and Cloning of a Tyrosine tRNA Gene," Chapter 8 In <u>Methods in Enzymology</u> 68:109-151.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number 544042000100	Application Number 10/820,998
		Applicant <div style="text-align: center;">Randolph A. MOECKLI et al.</div>	
		Filing Date April 7, 2004	Group Art Unit 1712
		Mailing Date October 12, 2004	
	39.	Carlsson, C. et al. (March 21, 1996). "Screening for Genetic Mutations," <i>Nature</i> 380:207.	
	40.	Cheng, L. et al. (May 1993). "In vivo Promoter Activity and Transgene Expression in Mammalian Somatic Tissues Evaluated by Using Particle Bombardment," <i>Proc. Natl. Acad. Sci. USA</i> 90:4455-4459.	
	41.	Crockford, T. et al. (October 1991). "Inter- and Intra-Specific Variation in Myosin Light Chain and Troponin I Composition in Fast Muscle Fibres From Two Species of Fish (Genus <i>Oreochromis</i>) Which Have Different Temperature-Dependent Contractile Properties," <i>J. Muscle Res. Cell Motil.</i> 12(5):439-446.	
	42.	De Mesmaeker, A. et al. (1994). "Comparison of Rigid and Flexible Backbones in Antisense Oligonucleotides," <i>Bioorganic & Medicinal Chem. Lett.</i> 4(3):395-398.	
	43.	De Mesmaeker, A. et al. (1994). "Novel Backbone Replacements for Oligonucleotides" Chapter 2 <i>In Carbohydrate Modifications in Antisense Research</i> ASC Symposium Series 580. Sanghui, Y.S. et al. eds. pp. 24-39.	
	44.	Dempcy, R.O. et al. (June 1995). "Synthesis of a Thymidyl Pentamer of Deoxyribonucleic Guanidine and Binding Studies with DNA Homopolynucleotides," <i>Proc. Natl. Acad. Sci. USA</i> 92:6097-6101.	
	45.	Eckstein, F. ed. (1991). <i>Oligonucleotides and Analogues: A Practical Approach</i> Oxford University Press pp. ix-xvii (Table of Contents Only.)	
	46.	Egholm, M. et al. (October 7, 1993). "PNA Hybridizes to Complementary Oligonucleotides Obeying the Watson-Crick Hydrogen-Bonding Rules," <i>Nature</i> 365:566-568.	
	47.	Egholm, M. et al. (1992). "Peptide Nucleic Acids (PNA). Oligonucleotide Analogues with an Achiral Peptide Backbone," <i>J. Am. Chem. Soc.</i> 114:1895-1897.	
	48.	Farah, C.S. et al. (June 1995). "The Troponin Complex and Regulation of Muscle Contraction," <i>FASEB J.</i> 9:755-767.	
	49.	Ferry, N. et al. (October 1991). "Retroviral-mediated Gene Transfer into Hepatocytes <i>in vivo</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 88:8377-8381.	
	50.	Filatov, V.L. et al. (1999). "Troponin: Structure, Properties, and Mechanism of Functioning," <i>Biochemistry</i> 64(9):969-985.	
	51.	Fleer, R. (1992). "Engineering Yeast for High Level Expression," <i>Curr. Opin. Biotech</i> 3(5):486-496.	
	52.	Galfre, G. et al. (1981). "Preparation of Monoclonal Antibodies: Strategies and Procedures" Chapter 1 <i>In Methods In Enzymology</i> 73(B):3-46.	
	53.	Gao, X. et al. (1994). "Unusual Conformation of a 3'-Thioformacetal Linkage in a DNA Duplex," <i>J. Biomolecular NMR</i> 4:17-34.	
	54.	GenBank Accession No. AA900587, "Normalization and Subtraction: Two Approaches to Facilitate Gene Discovery," created April 7, 1998, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			
PTO/SB/ 08 (2-92) pa- 917430		Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE	

Form PTO-1449		Docket Number 544042000100	Application Number 10/820,998
INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Applicant	
		Randolph A. MOECKLI et al.	
		Filing Date April 7, 2004	Group Art Unit 1712
		Mailing Date October 12, 2004	
	55.	GenBank Accession No. AB001687, "Primary Structure of Troponin I Isoforms from the Ascidian Halocynthia Roretzi," created April 9, 2002, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	56.	GenBank Accession No. AF020769, "H. sapiens mRNA for Cardiac Ventricular Troponin C on Idiopathic Dilated Cardiomyopathy," created December 20, 1997, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	57.	GenBank Accession No. BG891770, "Edinburgh University/Sanger Centre Nematode EST Project," created June 4, 2001, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	58.	GenBank Accession No. BI065677, "Chicken ESTs From Fat," created June 15, 2001, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	59.	GenBank Accession No. CAA62301, "Close Physical Linkage of Human Troponin Genes: Organization, Sequence, and Expression of the lOcus Encoding Cardiac Troponin I and Slow Skeletal Troponin T," created October 15, 1999, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	60.	GenBank Accession No. J04760, "cDNA Sequence, Tissue-Specific Expression, and Chromosomal Mapping of the HUMAN Slow-Twitch Skeletal Muscle Isoform of Troponin I," created January 14, 1995, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	61.	GenBank Accession No. J04992, "cDNA Clone and Expression Analysis of Rodent Fast and Slow Skeletal Muscle Troponin I mRNAs," created April 27, 1993, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	62.	GenBank Accession No. L04347, "Isolation, Expression, and Mutation of a Rabbit Skeletal Muscle cDNA Clone for Troponin I. The Role of the NH2 Terminus of Fast Skeletal Muscle Troponin I in its Biological Activity," created April 27, 1993, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	63.	GenBank Accession No. M33772, "Cloning, Structural Analysis, and Expression of the Human Fast Twitch Skeletal Muscle Troponin C Gene," created January 14, 1995, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	64.	GenBank Accession No. M37984, "Cloning, Structural Analysis, and Expression of the Human Slow Twitch Skeletal Muscle/Cardiac Troponin C Gene," created August 3, 1993, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, three pages.	
	65.	GenBank Accession No. NM_003141, "SS-A/Ro52, An Autoantigen Involved in CD28-Mediated IL-2 Production," created August 23, 2004, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, four pages.	
	66.	GenBank Accession No. X13697, "Ribonucleoprotein SS-B/La Belongs to a Protein Family With Consensus Sequences for RNA-Binding," created December 13, 1994, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			
PTO/SB/ 08 (2-92) pa- 917430		Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE	

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number 544042000100	Application Number 10/820,998
		Applicant Randolph A. MOECKLI et al.	
		Filing Date April 7, 2004	Group Art Unit 1712
		Mailing Date October 12, 2004	
	67.	GenBank Accession No. Z11518, "Human Histidyl-tRNA Synthetase: Recognition of Amino Acid Signature Regions in Class 2a Aminoacyl-tRNA Synthetases," created February 9, 1999, located at < http://www.ncbi.nlm.nih.gov > last visited on September 8, 2004, two pages.	
	68.	Graham, F.L. et al. (1977). "Characteristics of a Human Cell Line Transformed by DNA from Human Andeovirus Type 5," <i>J. Gen. Virol.</i> 36:59-72.	
	69.	Guatelli, J.C. et al. (March 1990). "Isothermal, <i>in vitro</i> Amplification of Nucleic Acids by a Multienzyme Reaction Modeled After Retroviral Replication," <i>Proc Natl. Acad. Sci. USA</i> 87:1874-1878.	
	70.	Hayden, M. et al. (June, 1995). "Expression in <i>Escherichia coli</i> and Affinity Purification of a CKS-Troponin I Fusion Protein," <i>Protein Expression and Purification</i> 6(3):256-264.	
	71.	Herdewijn, P. et al. (1994). "Hexopyranosyl-Like Oligonucleotides" Chapter 6 <i>In Carbohydrate Modifications in Antisense Research</i> ASC Symposium Series 580. Sanghui, Y.S. et al. ed. pp. 80-99.	
	72.	Herz, J. et al. (April 1993). "Adenovirus-Mediated Transfer of Low Density Lipoprotein Receptor Gene Acutely Accelerates Cholesterol Clearance in Normal Mice," <i>Proc. Natl. Acad. Sci. USA</i> 90:2812-2816.	
	73.	Hopp, T.P. et al. (October 1988). "A Short Polypeptide Marker Sequence Useful for Recombinant Protein Identification and Purification," <i>Bio/Technology</i> 6:1204-1210.	
	74.	Horn, T. et al. (1996). "Oligonucleotides with Alternating Anionic and Cationic Phosphoramidate Linkages: Synthesis and Hybridization of Stereo-uniform Isomers," <i>Tetrahedron Letters</i> 37(6):743-746.	
	75.	Innis et al. eds. (1990). <u>PCR Protocols: A Guide to Methods and Applications</u> Academic Press, Inc.: San Diego, CA pp. v-x (Table of Contents Only.)	
	76.	Jenkins, G.N. et al. (June 1995). "The Biosynthesis of Carbocyclic Nucleosides," <i>Chem. Soc. Rev.</i> 24(3):169-176.	
	77.	Jung, P.M. et al. (1994). "Hybridization of Alternating Cationic/Anionic Oligonucleotides to RNA Segments," <i>Nucleoside & Nucleotide</i> 13(6&7):1597-1605.	
	78.	Kay, M.A. et al. (1992). "Hepatic Gene Therapy: Persistent Expression of Human α 1-Antitrypsin in Mice After Direct Gene Delivery <i>In Vivo</i> ," <i>Human Gene Therapy</i> 3:641-647.	
	79.	Kurjan, J. et al. (October 1982). "Structure of a Yeast Pheromone Gene (<i>MFα</i>): A Putative α -Factor Precursor Contains Four Tandem Copies of Mature α -Factor," <i>Cell</i> 30:933-943.	
	80.	Kwoh, D.Y. et al. (February 1989). "Transcription-based Amplification System and Detection of Amplified Human Immunodeficiency Virus Type 1 with a Bead-Based Sandwich Hybridization Format," <i>Proc. Natl. Acad. Sci. USA</i> 86:1173-1177.	
	81.	Landegren, U. et al. (August 26, 1988). "A Ligase-Mediated Gene Detection Technique," <i>Science</i> 241:1077-1080.	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			
PTO/SB/ 08 (2-92) pa- 917430		Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE	

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 544042000100	Application Number 10/820,998
	Applicant Randolph A. MOECKLI et al.	
	Filing Date April 7, 2004	Group Art Unit 1712
	Mailing Date October 12, 2004	

82.	Letsinger, R.L. (1970). "Phosphoramidate Analogs of Oligonucleotides," <i>J. Org. Chem.</i> 35(11):3800-3803.
83.	Letsinger, R.L. et al. (1986). "Effects of Pendant Groups at Phosphorus on Binding Properties of d-ApA Analogues," <i>Nucl. Acids Res.</i> 14(8):3487-3499.
84.	Letsinger, R.L. et al. (1988). "Cationic Oligonucleotides," <i>J. Am. Chem. Soc.</i> 110:4470-4471.
85.	Lilius, G. et al. (1991). "Metal Affinity Precipitation of Proteins Carrying Genetically Attached Polyhistidine Affinity Tails," <i>Eur. J. Biochem.</i> 198:499-504.
86.	Lomell, H. et al. (1989). "Quantitative Assays Based on the Use of Replicable Hybridization Probes," <i>J. Clin. Chem.</i> 35(9):1826-1831.
87.	Lutz-Freyermuth, C. et al. (August 1990). "Quantitative Determination That One of Two Potential RNA-Binding Domains of the A Protein Component of the U1 Small Nuclear Ribonucleoprotein Complex Binds with High Affinity to Stem-Loop II of U1 RNA," <i>Proc. Natl. Acad. Sci. USA</i> 87:6393-6397.
88.	Maddry, J.A. et al. (1994). "Synthesis of Nonionic Oligonucleotide Analogues" Chapter 3 <i>In Carbohydrate Modifications in Antisense Research</i> ASC Symposium Series 580. Sanghui, Y.S. et al. eds. pp. 40-51.
89.	Mag, M. et al. (1991). "Synthesis and Selective Cleavage of an Oligodeoxynucleotide Containing a Bridged Internucleotide 5'-Phosphorothioate Linkage," <i>Nucleic Acids Res.</i> 19(7):1437-1441.
90.	Maina, C.V. et al. (1988). "An <i>Escherichia coli</i> Vector to Express and Purify Foreign Proteins by Fusion to and Separation From Maltose-Binding Protein," <i>Gene</i> 74:365-373.
91.	Martin, G.A. et al. (January 10, 1992). "GAP Domains Responsible for Ras p21-Dependent Inhibition of Muscarinic Atrial K ⁺ Channel Currents," <i>Science</i> 255:192-194.
92.	Martin, G.A. et al. (November 16, 1990). "The GAP-Related Domain of the Neurofibromatosis Type 1 Gene Product Interacts with <i>ras</i> p21," <i>Cell</i> 63:843-849.
93.	Meier, C. et al. (1992). "Peptide Nucleic Acids (PNAs) - Unusual Properties of Nonionic Oligonucleotide Analogues," <i>Chem. Int. Ed. English</i> 31(8):1008-1010.
94.	Munro, S. et al. (July 18, 1986). "An Hsp70-Like Protein in the ER: Identity with the 78 kd Glucose-Regulated Protein and Immunoglobulin Heavy Chain Binding Protein," <i>Cell</i> 46:291-300.
95.	Narang, S.A. et al. (1979). "Improved Phosphotriester Method for the Synthesis of Gene Fragments" Chapter 6 <i>In Methods In Enzymology</i> 68:90-99.
96.	O'Reilly D.R. et al. (1992). <u>Baculovirus Expression Vectors: A Laboratory Manual</u> W.H. Freeman and Company: New York, NY pp. v-x (Table of Contents Only.)
97.	Pauwels, R. et al. (1986). "Biological Activity of New 2-5A Analogues," <i>Chemica Scripta</i> 26:141-145.

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number 544042000100	Application Number 10/820,998
		Applicant Randolph A. MOECKLI et al.	
		Filing Date April 7, 2004	Group Art Unit 1712
		Mailing Date October 12, 2004	
	98.	Pierce, H.H. et al. (September 4, 1998). "Identification of Troponin C Antagonists from a Phage-Displayed Random Peptide Library," <i>J. Biol. Chem.</i> 273(36):23448-23453.	
	99.	Rawls, R.L. (June 2, 1997). "Optimistic About Antisense," <i>Chemical and Engineering News</i> 75(22):35-39.	
	100.	Rosenfeld, M.A. et al. (January 10, 1992). "In Vivo Transfer of the Human Cystic Fibrosis Transmembrane Conductance Regulator Gene to the Airway Epithelium," <i>Cell</i> 68:143-155.	
	101.	Sawai, H. (1984). "Synthesis and Properties of Oligoadenylic Acids Containing 2' - 5' Phosphoramidate Linkage," <i>Chemistry Letters</i> 805-808.	
	102.	Schatz, P.J. (October 11, 1993). "Use of Peptide Libraries to Map the Substrate Specificity of a Peptide-Modifying Enzyme: a 13 Residue Consensus Peptide Specifies Biotinylation in <i>Escherichia coli</i> ," <i>Bio/Technology</i> 11:1138-1143.	
	103.	Schmidt, T.G.M. et al. (1993). "The Random Peptide Library-Assisted Engineering of a C-Terminal Affinity Peptide, Useful for the Detection and Purification of a Functional Ig Fv Fragment," <i>Protein Engineering</i> 6(1):109-122.	
	104.	Schultz, L.D. et al. (1987). "Expression and Secretion in Yeast of a 400-kDa Envelope Glycoprotein Derived from Epstein-Barr Virus," <i>Gene</i> 54:113-123.	
	105.	Skerra, A. et al. (March 1991). "The Functional Expression of Antibody F _v Fragments in <i>Escherichia coli</i> : Improved Vectors and a Generally Applicable Purification Technique," <i>Bio/Technology</i> 9:273-278.	
	106.	Skinner, R.H. et al. (August 5, 1991). "Use of the Glu-Glu-Phe C-Terminal Epitope for Rapid Purification of the Catalytic Domain of Normal and Mutant ras GTPase-activating Proteins," <i>J. Biol. Chem.</i> 266:14163-14166.	
	107.	Smith, D.B. et al. (1988). "Single-Step Purification of Polypeptides Expressed in <i>Escherichia coli</i> as Fusions with Glutathione S-Transferase," <i>Gene</i> 67:31-40.	
	108.	Sprinzl, M. et al. (1977). "Enzymatic Incorporation of ATP and CTP Analogues into the 3' End of tRNA," <i>Eur. J. Biochem.</i> 81:579-589.	
	109.	Urlaub, G. et al. (July 1980). "Isolation of Chinese Hamster Cell Mutants Deficient in Dihydrofolate Reductase Activity," <i>Proc. Natl. Acad. Sci. USA</i> 77(7):4216-4220.	
	110.	Van Brunt, J. (April 1990). "Amplifying Genes: PCR and its Alternatives," <i>Bio/Technology</i> 8:291-294.	
	111.	Vassilyev, D.G. et al. (April 1998). "Crystal Structure of Troponin C in Complex with Troponin I Fragment at 2.3-Å Resolution," <i>Proc. Natl. Acad. Sci. USA</i> 95:4847-4852.	
	112.	von Kiedrowski, G. et al. (1991). "Parabolic Growth of a Self-Replicating Hexadeoxynucleotide Bearing a 3'-5'-Phosphoramidate Linkage," <i>Angew Chem. Intl. Ed. English</i> 30(4):423-426.	
	113.	Wang, C.L.A. et al. (1981). "Binding of Lanthanide Ions to Troponin C," <i>Biochemistry</i> 20:2439-2444.	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			
PTO/SB/ 08 (2-92) pa- 917430		Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE	

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 544042000100	Application Number 10/820,998
	Applicant Randolph A. MOECKLI et al.	
	Filing Date April 7, 2004	Group Art Unit 1712
	Mailing Date October 12, 2004	

114.	Ward, E.S. et al. (October 12, 1989). "Binding Activities of a Repertoire of Single Immunoglobulin Variable Domains Secreted From <i>Escherichia coli</i> ," <i>Nature</i> 341:544-546.
115.	Wilson, J.M. et al. (January 15, 1992). "Heptocyte-Directed Gene Transfer in Vivo Leads to Transient Improvement of Hypercholesterolemia in Low Density Lipoprotein Receptor-Deficient Rabbits," <i>J. Biol. Chem.</i> 267(2):963-967.
116.	Wolff, J.A. et al. (March 23, 1990). "Direct Gene Transfer into Mouse Muscle in Vivo," <i>Science</i> 247:1465-1468.
117.	Wu, D.Y. et al. (1989). "The Ligation Amplification Reaction (LAR) - Amplification of Specific DNA Sequences Using Sequential Rounds of Template-Dependent Ligation," <i>Gene</i> 4:560-569.
118.	Wu, G.Y. et al. (October 15, 1988). "Receptor-Mediated Gene Delivery and Expression <i>in Vivo</i> ," <i>J. Biol. Chem.</i> 263(29):14621-14624.
119.	Zelenin, A.V. et al. (1993). "Transfer of Foreign DNA into the Cells of Developing Mouse Embryos by Microprojectile Bombardment," <i>FEBS Letts.</i> 315(1):29-32.

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.